

(ii) To minimise irregularities in the Savings Bank transactions orders are being issued to the Comptroller for arranging for the despatch of acknowledgment slips, in respect of accounts standing in the name of minors, women, public bodies and associations.

(iii) As suggested by the Revenue Commissioner, Officers inspecting stamps, opium, etc., should be asked to record certificates of verification in their own hand.

(iv) The system of remittance of specie between Treasuries by means of motor buses may be extended as far as circumstances permit.

(v) Steps may be taken to equip Treasuries — particularly Taluk Treasuries with necessary articles of furniture, such as remittance boxes, almirahs, etc. Proposals for this purpose may be submitted for consideration at next Budget time.

4. Government wish once again to emphasise the need for the selection of qualified officials for employment in Treasuries. It is provided that a pass in Accounts Higher should be insisted upon in the case of every official employed in District Treasuries. The Revenue Commissioner now suggests that a pass in accounts lower should be made obligatory for the post of Nagadi Gumastha in Taluk Treasuries. This suggestion is approved.

5. The arrangement sanctioned in the Government Order of 21st December 1927, according to which duly qualified men may be deputed from the Comptroller's Office to the District Treasuries for employment as Head Accountants should be fully taken advantage of by the Deputy Commissioners. The interchange of officials between the District and Taluk Treasuries on the one hand and between District Treasury and Comptroller's Office on the other is desirable in the interests of Treasury Administration.

N. MADHAVA RAO,

Chief Secretary to Government.

DEVELOPMENT SECRETARIAT.

Reviews the Report on the working of the Agricultural Department for the year 1928-29.

READ—

The Administration Report of the Agricultural Department for the year 1928-29, received with letter No. Per. 45—29-30, dated the 8—16th October 1929, from the Director of Agriculture in Mysore.

ORDER NO. D. 9630-86—A. & E. 134-29-3, DATED 24TH FEBRUARY 1930.

Recorded.

Dr. Leslie C. Coleman was in charge of the Department during the whole of the year under report.

Seasonal conditions.—The agricultural conditions during the year were on the whole average though rather unfavourable for coffee and cotton. A very favourable North-Eastern Monsoon led to extensive cultivation of paddy and sugar-cane. The unusual distribution of the rainfall made the fodder situation rather anxious.

Chemical Section.—Manurial experiments were carried out on a large number of important crops, such as ragi, paddy, jola, sugar-cane, coffee, arecanut and cocoanut. The work in the Chemical section was correlated to that in the field, by planning the latter in close consultation with the Agricultural Chemist. The growing popularity of artificial fertilisers rendered it important to conduct experiments to investigate their value and suitability to the several crops of the State. The results so far obtained seem to indicate that Ammophos, Diammophos, and Leunaphos might on the whole be advantageously employed on crops which ordinarily respond to the application of both nitrogenous and phosphatic manures, though it might be occasionally necessary to supplement the combined fertiliser with some other fertiliser to obtain the exact proportion required for particular crops. These experiments also confirmed the belief that artificial fertilisers gave the best results only when used along with organic manures, such as farm-yard or green manure.

Plant Breeding.—The strengthening of the Botanical Section rendered it possible to expand the work of plant breeding work on ragi, groundnut, cotton and sugar-cane was continued. A very important development this year was the organisation of a system of seed farms. An officer of the Botanical Section was placed in charge of seed work and seed from prolific strains tested on a field scale at Hebbal was handed over to him for being multiplied on carefully selected and supervised seed farms. Fifteen seed farms were opened for this purpose in the Hain ragi area. The seed from these farms will be distributed through the agency of selected co-operative Societies. In the words of the Director, "this is the first link in a chain which it is proposed to extend from the Experimental Farm to the village and which when complete is planned to supply every year pure seed for over two lakhs of acres." A Plant Breeding Station was also opened at Hunsur where work on kar ragi has been commenced.

The Nagenhalli Farm, situated in the Cauvery channel area, was converted into a paddy breeding station which is of importance in view of its being in the Cauvery channel area, and being typical of the large extent which will come under cultivation when the Irwin Canal is completed.

With regard to cotton, about 7,000 acres were sown with the certified seed of Sanhatti (selection 69) which is gaining in popularity and the results were on the whole favourable. Arrangements have been made with the help of co-operative societies to distribute this seed on a more extended scale, and it is hoped, with favourable seasons to replace the mixed local crop in a few years.

Mycological Section.—The work of this section is still said to suffer from the handicap of a limited staff. The most important item of work with which it was concerned was as usual the investigation of the Koleroga of the arecanut. It is interesting to learn that an important discovery has been made in regard to the resting spores of the fungus causing this disease which might eventually lead to its permanent eradication. Government trust that the investigation will be vigorously pursued to a successful termination. Progress was also made in the direction of securing increased economy and efficiency in the use of sprayers and spraying mixture for the control of this disease. Over 5,000 acres of areca were sprayed during the year and a beginning was made in the co-operative purchase and distribution of sprayers and spraying mixture by the establishment of a society for this purpose. This is a move in the right direction and it is hoped that many more such societies will be organised in the near future.

About 3,000 acres of coffee were sprayed against diseases and depots were opened for the supply of sprayers and spraying mixture to the planters. Experiments with a special motor sprayer for large scale spraying are said to be giving promising results. It is gratifying to note that the United Planters' Association of Southern India have appointed a special officer to co-operate with the Department in the investigation of diseases of Coffee on the Experimental Station at Balehonnur. The Director expects results of value from this interesting scheme of co-operation.

Investigation into the Spike Disease of sandal was continued in co-operation with the Entomological Section, the Forest Department and the Professor of Botany of the Mysore University. Special attention is being devoted to the study of the nature of the microscopic intra cellular bodies found in the leaves of "spiked" sandal and referred to in the last year's report.

Entomological Section.—Extensive campaigns were organised in the Districts against three serious insect pests of crops, viz., the Kamblihula and the jola and the rice grass hoppers. The Director states that in order to carry out really successful combative measures against these pests, the hearty co-operation of the raiyats is necessary and that he is in consultation with the Revenue Commissioner with a view to enlisting the interest and assistance of the Village Panchayats. Government trust that such co-operation will be readily forthcoming. Field work was also done in connection with the control of the avare-pod-borer, the mango-hopper and the sugar-cane and coffee borers. With regard to the Coffee borer the Director is not very sanguine that the method of control by the hand picking of beetles will become popular with the planters. He states that experiments are in progress to find out a spray which will prevent oviposition or kill eggs and larva. It is hoped that these experiments will be successful. Progress in Apiculture was slow; but some little headway was made and it is reported that His Highness the Maharaja graciously evinced interest in the work.

Experimental Farms.—The most important work done on the Hebbal Farm was the testing on a field scale of the strains of Hain ragi developed by the Botanical Section. The seed so raised from three of the most prolific strains was distributed to the seed farms as has already been mentioned. Experiments on the rotation of ragi with a leguminous crop such as groundnut or Togari gave marked results. Sugar-cane experiments established the superiority of H. M. 320 over H. M. 544 which had held the field so far.

On the Babbur Farm the highest crops of sugar-cane yet grown were produced during the year, most of which was distributed for seed. The other items of work carried out were cotton breeding, growing of a rotation crop of jola and manurial experiments on cotton, jola and cocoanut. Valuable results are expected from the manurial experiments on the cocoanut which have been in progress for the past three years.

The most important work done on the Marthur Farm was the valuable series of manurial experiments on the Arecanut, the preliminary selection work on pepper and the first planting of Robusta Coffee. Great interest attaches to this last as the success of the experiment might influence the future agricultural development of the Shimoga malnad. A large number of sugar-cane setts was also distributed for seed purposes.

Coffee Experimental Station.—Marked progress was made in the development of this Station the area of which was enlarged by the acquisition of an adjoining extent of 65 acres of mature coffee. The building work was almost completed and the planting of selected seed was begun. About 300 successful grafts of Arabica Coffee on Robusta stock were also planted out. This method of improvement is said to hold out considerable promise for the future. Systematic demonstration of the control of important Coffee diseases and the importance of manuring was also carried out.

Agricultural Engineering.—The appointment of an Assistant Agricultural Engineer was sanctioned but the post could not be filled up before the end of the year. Even with this extra post the Director states that the section is seriously undermanned, especially in view of the large number of departmental building works in progress.

The most important work done in the Section was the testing of ploughs and sugar-cane mills sent in by manufacturers and comparing them with those at present being recommended by the Department. A ploughing demonstration with a high powered tractor was carried out on the Babbur Farm for the eradication of "hariali" grass on black cotton soil and the results were promising.

The Director refers to the importance of providing advice and assistance to agriculturists in the sinking of irrigation wells and suggests that close co-ordination might be established between his Department and that of Industries and Commerce for this work as well as for Agricultural Engineering in general. Government have in consideration a scheme for a close association between all the departments whose activities have a direct bearing on agricultural development, which it is hoped will facilitate effective joint action, and lead to speedier results.

Live Stock Section.—This Section which had hitherto confined its activities chiefly to the improvement of sheep took a great step forward during the year in turning its attention to the improvement of cattle also. A scheme for the establishment of a Cattle Breeding Station on the Parvatharayanakere Amrit Mahal Kaval near Ajjampur in the Kadur District was sanctioned by Government, and preliminary work has already been begun. This scheme on its present scale is calculated to supply every year at least 200 breeding bulls of good quality to the raiyats of the State and is capable of further expansion in the future if necessary. The thanks of Government are due to Mr. W. Smith, Imperial Dairy Expert who has given the Director the benefit of his great knowledge and experience in the elaboration of the scheme.

The establishment of this Station is the first step in bringing the whole operations of the Amrit Mahal Department hitherto conducted on traditional lines under scientific control and to concentrate its available resources for the fulfilment of its essential object—the provision of good live stock to the agriculturist of the State. Government await with interest the further plans towards this end promised by the Director on the return of Lt. A. A. Monteiro who has been deputed to Edinburgh for training in Live Stock.

The work on sheep consisted as usual in the breeding of cross-bred merino Mysore Sheep and the distribution of cross bred rams to selected sheep rearers, chiefly in the Kolar District. The activities of the Yellachihalli Sheep Farm were expanded, but the experiments with double crosses started on the Babbur Farm are said to have been hindered by heavy mortality caused by a parasitic disease. It is pleasing to note that the work of the Kolar Sheep Breeders' Association is increasing in volume and usefulness and that the cross bred wool produced by them has found favour with the Cawnpur Woollen Mills. The fact that such wool has realised over twice the price of the country white wool and over $3\frac{1}{2}$ times the price of the country mixed is an indication of the possibilities in this direction and Government trust that strenuous efforts will be made towards a rapid increase in the production of cross bred wool in the future. The Director is also of opinion that owing to the favourable prices secured for country white wool as against the country mixed, the work of organising the grading and sale of country wool on a co-operative basis should be taken up in other important sheep rearing areas, Government agree with the Director and are pleased to consider any proposals submitted in this connection.

Agricultural Education.—The Hebbal Agricultural School continued to be popular, so much so that temporary arrangements had to be made to accommodate the large number of students admitted. Proposals for a new school are under the consideration of Government. Government agree with the Director that the question of the organisation of a new Agricultural College will have to be taken up in the near future.

There has been a marked development in Vernacular Agricultural Education during the year. The lines of the one at Chikanahalli were opened, one at Ramakrishna, and another at Kadur. The District Board, and the other at Ramakrishna, are also urging for the establishment of similar schools in each of the Districts through the public spirited generosity of Mr. G. Venkata. The Director states that the District Boards of Mysore, Kadur, Chitald, and are also urging for the establishment of similar schools in each of the Districts, but thinks that in view of the opinion expressed on this type of school by the Royal Commission on Agriculture it would be as well to proceed warily in the matter, though perhaps such schools may have better chances of success in Mysore than in most other parts of India owing to the greater interest evinced by local bodies in this form of education.

Demonstration and Propaganda in the District.—The organisation for carrying out the important work of demonstration and propaganda in connection with agricultural improvements was considerably improved during the year. The Eastern Division was sub-divided into two circles of two districts each, in order to provide for more satisfactory supervision and the District Staff was also strengthened so as to have approximately one Agricultural Inspector and two Fieldmen for every two Taluks of the State.

There was a marked increase in the sale of improved ploughs in the Eastern Districts, especially in the Bangalore and Anekal Taluks, while there was a heavy fall in sales in the Western Districts principally in the black cotton soil areas. Government agree with the view of the Director that more vigorous propaganda, especially through Co-operative Societies and Village Panchayets, would lead to a greatly increased introduction of improved ploughs. The Director is requested to investigate the reasons for the fall in sales in the black cotton area and to suggest remedial action. Quite possibly a different type of implement suited to the nature of work in these areas may have to be designed.

Commercial Fertilisers.—There was a marked increase in the use of commercial fertilisers even for the ordinary raiyats' crops and the indications are that these fertilisers are becoming more and more popular. Government agree with the Director that the sales of these manures should be left as far as possible in the hands of private Co-operative agencies, the function of the Department being merely to demonstrate their value in relation to the several crops, popularise their use and see that the raiyat gets good value for his money.

Introduction of seed of improved varieties.—In addition to Hain Ragi and cotton referred to above seed of improved varieties of sugar-cane and paddy was also largely distributed with the aid of the District Staff.

Work in Association with Local Organisations.—Government learn with pleasure that the District Boards are taking a great interest in the work of the Department and

are heartily co-operating with it. Instances of private co-operation and munificence in the cause of the Agricultural Development have already been noted with appreciation. Government welcome these evidences of the growing recognition of the importance of the work of the Department, and of the confidence on the part of the people that it is giving a proper lead to the agriculture of the country. Government also note with appreciation that the Department enjoyed the close co-operation of sister departments, and that this assistance has begun to be reflected in useful progress, especially in agricultural co-operation.

Finances.—Some little progress was made in the collection of oil cake advances, reducing the balance outstanding (after deducting certain irrecoverable items written off) to Rs. 12,173-12-5 according to the Departmental books. It is hoped that efforts will be made finally to adjust these longstanding arrears during the current year.

The total turn-over in the Central Implement Depot was Rs. 80,692-8-1 as against Rs. 93,672-15-0 last year. The collection of arrears should be expedited.

Conclusion.—On the whole the Report shows marked expansion and progress in some of the most important sections of the work of the Department and Dr. Coleman deserves to be complimented on the excellent record he has been able to place before Government. Government wish to express their appreciation of the manner in which he has enlisted the co-operation of District Boards, non-officials and non-official bodies, as well as the cordial and happy relations will be further strengthened and developed.

The very able and interesting note of the Director of the Royal Commission on Agriculture as applied to the consideration of Government and orders will be the Report is under course.

A RAO,
Secretary to Government,
Development Departments.

GENERAL SECRETARIAT.

Rates of Fees for Playing Out the Military Band.

READ—

Government Order No. G. 11477-8—Mily. 190-25-9, dated 28th April 1927, sanctioning certain rules for the operation of the 'Band Fund'.

Correspondence ending with letter No. C. 484—29, dated 1st February 1930, from the Chief Commandant, suggesting certain amendments to the Band Fund Rules.

ORDER No. G. 10390-1—MILY. 162-29-4, DATED 27TH FEBRUARY 1930,

In the rules sanctioned in the order of 28th April 1927 read above, no provision was made for meeting the transport charges of the Bandsmen. Since the Band quarters have now been shifted to the Hebbal Lines, it has become necessary to provide for such charges so that the Bandsmen may not have to walk long distances before arriving at the Bandstands or elsewhere. The Chief Commandant, therefore proposes to enhance the rates of fees for Full Band and Half Band from Rs. 75 and Rs. 50 to Rs. 88 and 60 respectively with a view to cover the conveyance charges of the Bandmaster and the Bandsmen. He has forwarded a draft set of rules embodying the change indicated above. The rules are approved and appended to this order. They will come into effect from 1st March 1930.

R. RANGA RAO,
General Secretary to Government.